IN THE CLAIMS:

Please cancel Claims 1 to 19 without prejudice or disclaimer of subject matter. The claims, as pending in the subject application, read as follows:

1 to 19. (Cancelled)

20. (Original) A method of manufacturing a semiconductor element, comprising the steps of:

forming a semiconductor layer having first electric characteristics on a substrate;

crystallizing the semiconductor layer having the first electric characteristics; and

growing a crystalline semiconductor layer having second electric characteristics on the crystallized semiconductor layer having the first electric characteristics, thereby growing a microcrystal grain so as to extend over the semiconductor layer having the first electric characteristics and the semiconductor layer having the second electric characteristics.

21. (Original) A method of manufacturing a semiconductor element, comprising the steps of:

forming a crystalline semiconductor layer having first electric characteristics on a substrate; and

growing a crystalline semiconductor layer having second electric characteristics on the semiconductor layer having the first electric characteristics, thereby growing a microcrystal grain so as to extend over the semiconductor layer having the first electric characteristics and the semiconductor layer having the second electric characteristics.

22. (Original) A method of manufacturing a semiconductor element, comprising the steps of:

forming a semiconductor layer having first electric characteristics on a substrate;

growing a semiconductor layer having second electric characteristics on the semiconductor layer having the first electric characteristics; and

effecting annealing to form a microcrystal grain so as to extend over the semiconductor layer having the first electric characteristics and the semiconductor layer having the second electric characteristics.

23. (Original) A method of manufacturing a semiconductor element, comprising the steps of:

forming a crystalline semiconductor layer on a substrate; and

ion-implanting a dopant into the semiconductor layer to form a semiconductor junction in a microcrystal grain of the semiconductor layer.

24. (Original) A method of manufacturing a semiconductor element,

comprising the step of generating a plasma in a gas phase to decompose a source gas thus forming a semiconductor layer comprising microcrystals on a substrate, wherein an electric power to be applied to the plasma is periodically changed to form a semiconductor layer comprising microcrystal grains of different sizes as a mixture.

25. (Original) A method of manufacturing a semiconductor element, comprising the step of generating a plasma in a gas phase to decompose a source gas thus forming a semiconductor layer comprising microcrystals on a substrate, wherein a halogen-containing gas is added at regular intervals into the source gas to form a semiconductor layer comprising microcrystal grains of different sizes as a mixture.